

Regulated Substances

YEAR	CONSTITUENT	AVERAGE DETECTED LEVELS	RANGE OF DETECTED LEVELS	MCL	MCLG	TYPICAL SOURCE
2006	Barium (ppm)	0.061	0.050 - 0.082	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
2006	Fluoride (ppm)	0.367	0.100 - 0.500	4	4	Erosion of natural deposits; Water additive which promotes strong teeth
2006	Nitrate (ppm)	0.127	0.010 - 0.350	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
2006	Total Haloacetic Acids (ppb)	11.1	5.8 - 20.6	60	NA	By-product of drinking water chlorination
2006	Total Trihalomethanes (ppb)	37.7	19.4 - 58.9	80	NA	By-product of drinking water chlorination
2006	Chloramines (ppm)	1.94	1.73 - 2.12	4	4	Disinfectant used to control microbes
2006	Gross Beta Particles & Photon Emitters (pCi/L)	4.65	4.6 - 4.7	50	NA	Decay of natural & man-made deposits of certain minerals that are radioactive & may emit forms of radiation known as photons & beta radiation
2006	Total Organic Carbon (ppm)	3.79	2.58 - 5.64	NA	NA	Naturally present in the environment

The City of Longview is on a reduced sampling schedule for lead and copper, due to an excellent compliance history. The results listed above are distribution samples taken from the customers' tap. Lead and copper has not been detected in water leaving the water treatment facilities. The source of lead and copper is corrosion of household plumbing systems.

YEAR	CONSTITUENT	HIGHEST SINGLE MEASUREMENT	LOWEST MONTHLY % OF SAMPLES MEETING LIMITS	TURBIDITY LIMITS	SOURCE OF CONTAMINANT
2006	Turbidity (NTU)	0.17	100	0.3	Soil runoff

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity is measured in Nephelometric Turbidity Units (NTU) and is a measurement of water clarity. This water quality parameter is monitored as a treatment technique (TT).

YEAR	CONSTITUENT	HIGHEST MONTHLY % OF POSITIVE SAMPLES	MCL	MCLG	UNITS OF MEASURE	SOURCE OF CONTAMINANT
2006	Total Coliform Bacteria	0	*	0	Presence	Naturally present in the environment

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present. Longview analyzes over 984 samples each year. Monthly tests reported no coliform bacteria present.

*Presence of coliform in 5% or more of the monthly samples.

Unregulated Substances: Disinfection By-Products

YEAR	CONSTITUENT	AVERAGE	RANGE	SOURCE OF CONTAMINANT
2006	Chloroform (ppb)	11.1	3.4 - 19.0	By-product of drinking water chlorination
2006	Bromoform (ppb)	2.3	ND - 5.6	By-product of drinking water chlorination
2006	Bromodichloromethane (ppb)	11.9	5.8 - 19.4	By-product of drinking water chlorination
2006	Chlorodibromomethane (ppb)	11.9	7.9 - 17.0	By-product of drinking water chlorination

All four of these substances constitute the total trihalomethanes parameter listed above in the regulated contaminants. Total trihalomethanes are a by-product of chlorination and have an MCL of 80 ppb.

YEAR	CONSTITUENT	AVERAGE	RANGE	SOURCE OF CONTAMINANT
2006	Dichloroacetic acid (ppb)	6.9	4.2 - 11.3	By-product of drinking water chlorination
2006	Trichloroacetic acid (ppb)	1.5	ND - 2.9	By-product of drinking water chlorination
2006	Dibromoacetic acid (ppb)	4.4	2.2 - 6.4	By-product of drinking water chlorination

All three of these substances constitute the total haloacetic acid parameter listed above in the regulated contaminants. Total haloacetic acids are a by-product of chlorination and have an MCL of 60 ppb.

Unregulated Contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Additional Parameters

CONSTITUENT	UNITS OF MEASURE	LONGVIEW WATER
Chloride	ppm	19 - 29
Sulfate	ppm	15 - 42
pH	pH units	8.4 - 9.1
Conductivity	µhos/cm	159 - 264
Total Alkalinity as CaCO ₃	ppm	20 - 27
Bicarbonate	ppm	20 - 33
Carbonate	ppm	0 - 1
Dissolved Solids	ppm	103 - 153
Calcium	ppm	17.2 - 29.9
Magnesium	ppm	3.34 - 5.28
Sodium	ppm	14.4 - 24.6
Total Hardness as CaCO ₃	ppm	56.7 - 96.4
Total Hardness in Grains	Grains/Gallon	3.3 - 5.6

Did You Know?

Table Definitions

Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which a water system must follow.

mrem/year - millirems per year (a measure of radiation absorbed by the body).

pCi/L - picocuries per liter (a measure of radioactivity).

NTU - Nephelometric turbidity units (a measure of turbidity).

ppm - Parts per million, or milligrams per liter (mg/L).

ppb - Parts per billion, or micrograms per liter (ug/L).

NA - Not applicable.

ND - Not detectable at testing limits.

- Water is the only substance that is found naturally on earth in three forms: liquid, gas, and solid; therefore allowing it to be found not only on the surface, but also in the ground and in the air.
- Water is essential to the human body's survival. A person can live for about a month without food, but only about a week without water.
- Americans drink more than one billion glasses of tap water each day. You can refill an 8 oz. glass of water approximately 15,000 times for the same cost as a six-pack of soda.
- Water helps to maintain healthy body weight by increasing metabolism and regulating appetite. It also leads to increased energy levels. The most common cause of daytime fatigue is actually mild dehydration. By the time a person feels thirsty, their body has lost over 1% of its total water amount.
- Water regulates the temperature of the human body, just as it regulates the earth's temperature. If you have caught a fever, you should drink lots of water. It can even prevent and alleviate headaches, and joint and back pain.
- The third highest use of indoor water is bathing, and because most of us like to use warm water when we bathe, it is also the second highest use of energy in the home. Energy efficient appliances are usually water efficient too.
- Clothes washers can use as much as 30 to 35 gallons of water per cycle and dishwashers as much as 25 gallons per cycle. A full dishwasher is more efficient than washing the same load by hand.
- Toilets can account for almost 30% of all indoor water use, more than any other fixture or appliance. An average of 20% of toilets leak.
- A small drip from a faucet can waste as much as 20 gallons of water a day.
- Of all the earth's water, 97% is salt water found in oceans and seas. Only 1% of the earth's water is available for drinking water. 2% is currently frozen.
- If all of the world's water were to fit into a gallon container, the fresh water available to use would equal only about one tablespoon.
- Human brains are 75% water. Human bones are 25% water. Human blood is 83% water.

Frequently Asked Questions About Your Water

If my water tastes or smells different, is it still safe to drink?

All water has its own unique taste and odor characteristics. Contaminants may be found in drinking water that can cause taste, color or odor problems. These types of problems are not necessarily causes for health concerns. The City of Longview, like many other water suppliers, occasionally experiences changes in taste and odor. Algae and bacteria naturally found in surface waters can produce different types of tastes and odors. Geosmin and 2-Methylisoborneol (MIB) have been identified as odor-causing compounds and are detectable at levels as low as five parts per trillion (ppt or nanograms per liter). When conditions are favorable (changes in temperature, excessive rainfall, flooding, drought, or dry weather conditions), the bacteria and certain blue-green algae produce a musty or earthy taste and odor. Although these contaminants impart an unpleasant taste and odor, they do not have an established Maximum Contaminant Level (MCL) nor pose any known health risks. Water that has been stored in a pipe for a long time, especially during warm weather, also may develop an odor. That explains why you may notice a change in your water after returning from vacation.

What is the hardness of the water?

Water supplied to you is considered soft in the Lake O' the Pines service area and soft to moderately hard in the Cherokee and Sabine River service areas. What makes water hard is a combination of minerals that are present in nearly all natural waters. The average hardness for water in 2006 from Lake Cherokee is 96 mg/L (5.6 grains/gallon), Lake O' the Pines is 57 mg/L (3.3 grains/gallon), and Sabine is 63 mg/L (3.7 grains/gallon).

Why does my water appear cloudy or milky at times?

Cloudy water is often caused by dissolved oxygen being released from the water. Cold water can hold more oxygen than warm water. Water saturated with oxygen will release oxygen as it warms or as the pressure is released. This release makes the water appear milky or cloudy, but it does not affect the safety of the water. The cloudiness usually will disappear in about 30 seconds.

Why does my water sometimes look brown or red?

Often your water is discolored because of pipeline breaks and repairs. The color comes from iron or mineral deposits inside the pipe that become dislodged during the repairs. If the color is due to line breaks, run the faucet until the water is clear. If the water does not clear within several minutes, call the water and sewer emergency line at 903-236-3030 for assistance.

What is the white build-up on my faucet strainers?

The white build-up is calcium carbonate. Lime is added to the water to adjust the pH to provide a stable water to prevent premature corrosion of the distribution system. This calcium carbonate product places a protective film that coats the inside of the water pipes much like the paint on your car or house protects the metal or wood. When there is a change in flow or the water usage increases in the pipeline, calcium carbonate build-up may break off and enter the water stream. Calcium carbonate may accumulate in the water heater or sink faucet strainers. To alleviate this problem, you can flush the lower drain system on your water heater or rinse off the deposits on the sink faucet strainer.

Longview Continues to Improve Your Water Quality and Service

Drinking water standards continue to tighten, and our challenge is to meet these stricter regulations. This means we must continue to update the treatment technology used at our water plants. As the City of Longview continues to grow, we continue to improve ourselves and the water that is sent to you and how it travels to your home or business. The City of Longview's Public Water system is widely recognized as a leader in the municipal utility industry and has made a measurable improvement to customer service.

The City of Longview's Public Water Supply licensed professionals are committed to providing a safe product for your use.

In January 2006, the Environmental Protection Agency (EPA) implemented new rules regarding surface water treatment; the Stage 2 Disinfectants & Disinfection By-products (Stage 2 DBP) Rule and the Long Term 2 Enhanced Surface Water Treatment (LT2) Rule.

The Stage 2 DBP Rule builds upon earlier rules that addressed disinfection by-products to improve your drinking water quality and provide additional public health protection from disinfection by-products. It is intended to reduce potential cancer and reproductive and developmental health risks from disinfection by-products in drinking water, which form when disinfectants are used to control microbial pathogens.

The purpose of the LT2 rule is to reduce illness linked with the contaminant Cryptosporidium and other disease-causing microorganisms that may be found in drinking water. Pathogens, such as Giardia and Cryptosporidium, are often found in water, and can cause gastrointestinal illness and other health risks if left undetected and untreated.

For both of these new rules, the City of Longview will evaluate and perform additional sampling on our source waters, water treatment plants, and distribution system for two (2) years to gather more information. This information will be compiled by the EPA and used to provide additional modifications or improvements in the treatment techniques used by the City of Longview.

Although East Texas experienced extremely dry conditions during 2006, the City of Longview did not implement any conservation strategies. The City did not experience any water shortages. This was due to excellent water supply planning done by previous city leaders.

Longview's Sources of Drinking Water

Longview uses surface water from three sources: Lake Cherokee, Sabine River, and Lake O' the Pines. A source water assessment has been completed by the Texas Commission on Environmental Quality (TCEQ) for all three water sources and the report is available to review by calling us at 903-753-4870 or 903-663-7641. It allows us to focus on our source water protection activities. The results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants will be found in this report. For more information on source water assessments and protection efforts at our system contact us at 903-753-4870. To monitor water quality in local rivers, streams, and reservoirs, the City of Longview has a Watershed Management Program. We work closely with the Sabine River Authority, Cherokee Water Company, Northeast Texas Municipal Water District, Texas Railroad Commission, Texas Commission on Environmental Quality (TCEQ), Texas Parks and Wildlife Commission, American Water Works Association, Texas Water Utilities Association and local industries to monitor and maintain a high level of water quality.



City of Longview Distribution System

Under normal operating conditions, the Cherokee, Sabine River, and Lake O' the Pines Water Treatment Plants treat and distribute water to elevated and ground storage tanks with the capacity of approximately 6 million gallons of water throughout the city in over 600 miles of pipeline. The east and southeast regions of Longview typically receive water from the Cherokee Water Treatment Plant. The west and southwest regions of Longview receive water from the Sabine River Water Treatment Plant. The north region receives water from the Lake O' the Pines Water Treatment Plant. Due to changes in demand and normal or emergency maintenance requirements, the typical distribution of water may change and residents may receive water from any of the water treatment plants.

